

.09/703,804

=> d his

(FILE 'HOME' ENTERED AT 19:35:17 ON 03 NOV 2002)

FILE 'REGISTRY' ENTERED AT 19:35:25 ON 03 NOV 2002

L1 STRUCTURE UPLOADED

L2 3172 S L1 SSS FULL

L3 STRUCTURE UPLOADED

L4 47340 S L3 SSS FULL

FILE 'CAPLUS' ENTERED AT 19:36:58 ON 03 NOV 2002

L5 9504 S L4

L6 1 S L5 AND (AVIAN? OR BIRD? OR CHICK?) AND INFECTIOUS(P) BURSAL?(P

FILE 'REGISTRY' ENTERED AT 19:39:01 ON 03 NOV 2002

L7 STRUCTURE UPLOADED

L8 12730 S L7 SSS FULL

FILE 'CAPLUS' ENTERED AT 19:41:07 ON 03 NOV 2002

L9 1 S (L2 OR L8) AND (AVIAN? OR BIRD? OR CHICK?) AND INFECTIOUS(P) B

09/703,804

=>

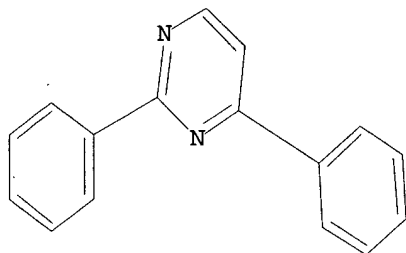
Uploading 8043.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full

FULL SEARCH INITIATED 19:36:00 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 7667 TO ITERATE

100.0% PROCESSED 7667 ITERATIONS

3172 ANSWERS

SEARCH TIME: 00.00.01

L2 3172 SEA SSS FUL L1

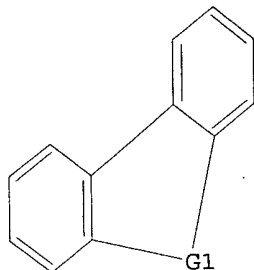
09/703,804

L3 STRUCTURE UPLOADED

=> d l3

L3 HAS NO ANSWERS

L3 STR



G1 O,S,N

Structure attributes must be viewed using STN Express query preparation.

=> s l3 sss full

FULL SEARCH INITIATED 19:36:35 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 581979 TO ITERATE

68.7% PROCESSED 400000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.10

47340 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 581979 TO 581979

PROJECTED ANSWERS: 68091 TO 69663

L4 47340 SEA SSS FUL L3

09/703,804

=> s l4

L5 9504 L4

=> s l5 and (avian? or bird? or chick?) and infectious(p)bursal?(p)disease?(p) vir?
and (IBDV or IBD)

18245 AVIAN?

29217 BIRD?

115021 CHICK?

28293 INFECTIOUS

923 BURSAL?

639419 DISEASE?

450159 VIR?

480 INFECTIOUS (P) BURSAL? (P) DISEASE? (P) VIR?

302 IBDV

1096 IBD

L6 1 L5 AND (AVIAN? OR BIRD? OR CHICK?) AND INFECTIOUS (P) BURSAL? (P) DI
SEASE? (P) VIR? AND (IBDV OR IBD)

=> d l6 abs ibib kwic 1

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A method is provided for treating **infectious bursal disease (IBD)** in an **avian** subject in need of such treatment. The method comprises administering to the subject a compd. of formulas I-IV [p = 1-8; A = O, S, NR (R = H, lower alkyl); X1, X2 = H, lower alkyl, lower alkoxy; R1, R2, X', X'', X3-X6 = lower alkyl, lower alkoxy, aryl, halo, etc.], or a pharmaceutically acceptable salt thereof, in an amt. sufficient to treat **IBD**. In another aspect, the invention provides a method of producing active immunity against **infectious bursal virus disease (IBD)** in an **avian** subject. The method comprises administering to a subject an immunogenic-amt. of an **IBDV** vaccine and a compd. selected from compds. I-IV. A compd. represented by I-IV is administered in an amt. sufficient to induce an immune response in the **avian** subject.

ACCESSION NUMBER: 2001:338336 CAPLUS

DOCUMENT NUMBER: 134:348244

TITLE: Methods and formulations using heterocyclic compounds for the treatment of infectious bursal disease in **avian** subjects

INVENTOR(S): Dykstra, Christine C.; Hudson, James C.; Tidwell, Richard R.; Boykin, David; Ewald, Sandra

PATENT ASSIGNEE(S): The University of North Carolina at Chapel Hill, USA; Auburn University; Georgia State University Research Foundation, Inc.

SOURCE: PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

Delacroix

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001032159	A2	20010510	WO 2000-US30066	20001101
WO 2001032159	A3	20020711		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-162877P P 19991101

OTHER SOURCE(S): MARPAT 134:348244

TI Methods and formulations using heterocyclic compounds for the treatment of infectious bursal disease in **avian** subjects

AB A method is provided for treating **infectious bursal disease (IBD)** in an **avian** subject in need of such treatment. The method comprises administering to the subject a compd. of formulas I-IV [p = 1-8; A = O, S, NR (R = H, lower alkyl); X1, X2 = H, lower alkyl, lower alkoxy; R1, R2, X', X'', X3-X6 = lower alkyl, lower alkoxy, aryl, halo, etc.], or a pharmaceutically acceptable salt thereof, in an amt. sufficient to treat **IBD**. In another aspect, the invention provides a method of producing active immunity against **infectious bursal virus disease (IBD)** in an **avian** subject. The method comprises administering to a subject an immunogenic-amt. of an **IBDV** vaccine and a compd. selected from compds. I-IV. A compd. represented by I-IV is administered in an amt. sufficient to induce an immune response in the **avian** subject.

ST heterocyclic deriv prepn **avian infectious bursal disease**; immunogen **avian infectious bursal virus disease** vaccine

IT Antiviral agents
B cell (lymphocyte)
Bird (Aves)
Chicken (Gallus domesticus)
Drug delivery systems
Infectious bursal disease virus
Vaccines

(heterocyclic compds. for treatment of **infectious bursal disease in avians**)

IT **200878-40-6**, 9H-Carbazole-2,7-dicarboximidamide
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(DAP 092; heterocyclic compds. for treatment of infectious bursal disease in **avians**)

IT 74733-75-8, BABIM 160522-92-9, DB 203 160522-95-2, DB 197
242807-45-0, DB 453 **338945-24-7**, SW 066
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(heterocyclic compds. for treatment of infectious bursal disease in

- avians)**
- IT 229308-77-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(heterocyclic compds. for treatment of infectious bursal disease in **avians)**
- IT 339049-82-0, DB 528
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(heterocyclic compds. for treatment of infectious bursal disease in **avians)**
- IT 107-15-3, 1,2-Diaminoethane, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; heterocyclic compds. for treatment of infectious bursal disease in **avians)**

09/703,804

=>

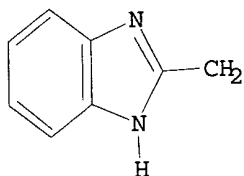
Uploading 8045.str

L7 STRUCTURE UPLOADED

=> d 17

L7 HAS NO ANSWERS

L7 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 17 sss full

FULL SEARCH INITIATED 19:40:17 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 124587 TO ITERATE

100.0% PROCESSED 124587 ITERATIONS

12730 ANSWERS

SEARCH TIME: 00.00.02

L8 12730 SEA SSS FUL L7

09/703,804

=> s (l2 or l8) and (avian? or bird? or chick?) and
infectious(p)bursal?(p)disease?(p) vir? and (IBDV or IBD)

583 L2
5396 L8
18245 AVIAN?
29217 BIRD?
115021 CHICK?
28293 INFECTIOUS
923 BURSAL?
639419 DISEASE?
450159 VIR?
480 INFECTIOUS(P)BURSAL?(P)DISEASE?(P) VIR?
302 IBDV
1096 IBD

L9 1 (L2 OR L8) AND (AVIAN? OR BIRD? OR CHICK?) AND INFECTIOUS(P)BURS
AL?(P)DISEASE?(P) VIR? AND (IBDV OR IBD)

=> d l9 abs ibib kwic hitrn 1

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A method is provided for treating **infectious bursal disease (IBD)** in an **avian** subject in need of such treatment. The method comprises administering to the subject a compd. of formulas I-IV [p = 1-8; A = O, S, NR (R = H, lower alkyl); X1, X2 = H, lower alkyl, lower alkoxy; R1, R2, X', X'', X3-X6 = lower alkyl, lower alkoxy, aryl, halo, etc.], or a pharmaceutically acceptable salt thereof, in an amt. sufficient to treat **IBD**. In another aspect, the invention provides a method of producing active immunity against **infectious bursal virus disease (IBD)** in an **avian** subject. The method comprises administering to a subject an immunogenic-amt. of an **IBDV** vaccine and a compd. selected from compds. I-IV. A compd. represented by I-IV is administered in an amt. sufficient to induce an immune response in the **avian** subject.

ACCESSION NUMBER: 2001:338336 CAPLUS
DOCUMENT NUMBER: 134:348244
TITLE: Methods and formulations using heterocyclic compounds for the treatment of infectious bursal disease in **avian** subjects
INVENTOR(S): Dykstra, Christine C.; Hudson, James C.; Tidwell, Richard R.; Boykin, David; Ewald, Sandra
PATENT ASSIGNEE(S): The University of North Carolina at Chapel Hill, USA; Auburn University; Georgia State University Research Foundation, Inc.
SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

Delacroix

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001032159	A2	20010510	WO 2000-US30066	20001101
WO 2001032159	A3	20020711		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-162877P P 19991101

OTHER SOURCE(S): MARPAT 134:348244

TI Methods and formulations using heterocyclic compounds for the treatment of infectious bursal disease in **avian** subjects

AB A method is provided for treating **infectious bursal disease (IBD)** in an **avian** subject in need of such treatment. The method comprises administering to the subject a compd. of formulas I-IV [p = . . . = lower alkyl, lower alkoxy, aryl, halo, etc.], or a pharmaceutically acceptable salt thereof, in an amt. sufficient to treat **IBD**. In another aspect, the invention provides a method of producing active immunity against **infectious bursal virus disease (IBD)** in an **avian** subject. The method comprises administering to a subject an immunogenic-amt. of an **IBDV** vaccine and a compd. selected from compds. I-IV. A compd. represented by I-IV is administered in an amt. sufficient to induce an immune response in the **avian** subject.

ST heterocyclic deriv prepn **avian infectious bursal disease**; immunogen **avian infectious bursal virus disease** vaccine

IT Antiviral agents
B cell (lymphocyte)
Bird (Aves)
Chicken (Gallus domesticus)
Drug delivery systems
Infectious bursal disease virus
Vaccines

(heterocyclic compds. for treatment of **infectious bursal disease** in **avians**)

IT 200878-40-6, 9H-Carbazole-2,7-dicarboximidamide
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(DAP 092; heterocyclic compds. for treatment of infectious bursal disease in **avians**)

IT **74733-75-8**, BABIM **160522-92-9**, DB 203
160522-95-2, DB 197 242807-45-0, DB 453 338945-24-7, SW 066
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(heterocyclic compds. for treatment of infectious bursal disease in **avians**)

IT 229308-77-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

09/703,804

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(heterocyclic compds. for treatment of infectious bursal disease in
avians)

IT 339049-82-0, DB 528
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)

(heterocyclic compds. for treatment of infectious bursal disease in
avians)

IT 107-15-3, 1,2-Diaminoethane, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; heterocyclic compds. for treatment of infectious bursal
disease in avians)

IT 74733-75-8, BABIM 160522-92-9, DB 203
160522-95-2, DB 197
RL: AGR (Agricultural use); BAC (Biological activity or effector, except
adverse); BSU (Biological study, unclassified); THU (Therapeutic use);
BIOL (Biological study); USES (Uses)
(heterocyclic compds. for treatment of infectious bursal disease in
avians)

=> d his

(FILE 'HOME' ENTERED AT 19:35:17 ON 03 NOV 2002)

FILE 'REGISTRY' ENTERED AT 19:35:25 ON 03 NOV 2002

L1 STRUCTURE UPLOADED

L2 3172 S L1 SSS FULL

L3 STRUCTURE UPLOADED

L4 47340 S L3 SSS FULL

FILE 'CAPLUS' ENTERED AT 19:36:58 ON 03 NOV 2002

L5 9504 S L4

L6 1 S L5 AND (AVIAN? OR BIRD? OR CHICK?) AND INFECTIOUS(P)BURSAL?(P

FILE 'REGISTRY' ENTERED AT 19:39:01 ON 03 NOV 2002

L7 STRUCTURE UPLOADED

L8 12730 S L7 SSS FULL

FILE 'CAPLUS' ENTERED AT 19:41:07 ON 03 NOV 2002

L9 1 S (L2 OR L8) AND (AVIAN? OR BIRD? OR CHICK?) AND INFECTIOUS(P)B